

Amendments to the Claims:

1. (Currently Amended) A network gateway device capable of providing location-based identification to network subscribers, comprising:

a processor that communicates with an access concentrator to ~~determine connection ports of host-generated data packets~~ receive one or more port identifiers assigned by the access concentrator and each port identifier is associated with a location-specific connection port of one or more hosts, the processor further determines one or more location-specific connection ports currently accessing the network by associating the one or more received port identifiers with one or more connection ports; and

a database associated with the network gateway device that stores the one or more location-specific connection port ports for the purpose of identifying one or more hosts associated with the connection port ~~connection ports within a network~~ that have been granted network authorization.

2. (Canceled)

3. The network device of Claim 1, wherein the processor uses VLAN protocol as a communication link between the processor and the access concentrator.

4. (Currently Amended) The network device of Claim 1, wherein the processor further comprises a querying agent capable of requesting ~~identification data related to the connection port of host-generated data packets~~ transmission of one or more port identifiers from the associated access concentrator.

5. The network device of Claim 4, wherein the querying agent uses Simple Network Management Protocol (SNMP) as the communication link between the network device and the access concentrator.

6. The network device of Claim 4, wherein the querying agent uses Extensible markup Language (XML) as the communication link between the network device and the access concentrator.

7. (Currently Amended) A method for implementing location-based identification in a communications network, comprising the steps of:

establishing [a] network connections ~~connection~~ between a plurality of hosts ~~host~~ and a network;

transmitting data packets from each of the ~~host~~ hosts through a location-specific, connection port;

identifying the location-specific, connection port of each of the hosts at an access concentrator ~~in the form of~~ by assigning a port identifier that is mapped to the location of the connection port;

communicating the port identifier to a network gateway device; [and]

storing the port identifier in a database in communication with the network gateway device, the database maps the port identifier to one or more hosts associated with the connection port, and

identifying, at the network gateway device, one or more hosts that have been granted network authorization based upon port identifiers that are currently stored in the database.

8. (Currently Amended) The method of Claim 7, wherein identifying the location-specific, connection port of each of the hosts at an access concentrator further comprises tagging the data packets being sent from each host with a port identifier at an access concentrator.

9. (Currently Amended) The method of Claim 8, wherein communicating the port identifier to a network gateway device further comprises transmitting the tagged data packets to a network gateway device.

10. (Currently Amended) The method of Claim 8, wherein tagging the data packets being sent from each host with a port identifier further comprises tagging the data packets being sent from each host with a port identifier that corresponds to a media access control (MAC) address.

11. (Currently Amended) The method of Claim 8, wherein tagging the data packets being sent from each host with a port identifier includes implementing the use of VLAN protocol.

12. (Canceled)

13. (Currently Amended) The method of Claim 7, wherein the step of identifying the location-specific, connection port at an access concentrator communicating the port identifier to a network gateway device further comprises the steps of:

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transmitting a port requesting query from the network gateway device to an access concentrator; and

transmitting a port identifying response from the access concentrator to the network gateway device.

14. (Currently Amended) The method of Claim 13, wherein transmitting a port requesting query from the network ~~interface~~ gateway device further comprises transmitting a SNMP (Simple Network Management Protocol) query.

15. (Currently Amended) The method of Claim 13, wherein transmitting a port requesting query from the network ~~interface~~ gateway device further comprises transmitting a XML (Extensible Markup Language) query.

16. (Currently Amended) The method of Claim 13, wherein transmitting a port identifying response further comprises transmitting a port identifier that corresponds with a media access control (MAC) address.

17. (Canceled)

18. (Currently Amended) A method for using location-based identification in a communications network, comprising:

accessing a database in communication with a network gateway device to identify ~~determine the identification status of~~ one or more connection ports within a communications network that are currently mapped to a port identifier; and

applying results of the identification ~~the identification status of connection ports~~ to a network system application.

19. (Canceled)

20. (Currently Amended) The method of Claim 18, further comprising executing the network system application at the network gateway device.

21. (Currently Amended) The method of Claim 18, wherein applying results of the identification ~~the identification status of connection ports~~ to a network system application further comprises applying the ~~identification status of~~ identified one or more connection ports to a network billing application that bills subscribers based on location.

22. (Currently Amended) The method of Claim 18, wherein applying results of the identification ~~the identification status of connection ports~~ to a network system application further comprises applying the ~~identification status of~~ identified one or more connection ports to an authorization application that provides authorization to network subscribers based on location.

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02 23. (Currently Amended) The method of Claim 18, wherein applying the results of the identification ~~identification status of connection ports~~ to a network system application further comprises applying the ~~identification status~~ identified one or more of the connection port to determine port-specific information that will be communicated to a connection port.
